FS F 77 ជ TOTAL THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY \* OLDMEDLINE, data from 1960 through 1965 from the Cumulated Left, right, and simultaneous left and right truncation are available in 0.15 The previous command name entered was not recognized by the FILE LAST UPDATED: 18 FEB 2000 (20000218/UP). FILE For a list of commands available to you in the current file, enter FILE 'MEDLINE' ENTERED AT 09:04:54 ON 29 FEB 2000 SINCE FILE SESSION Medicus (CIM), has been added to MEDLINE. See HELP 5075 SERUM FREE MEDIUMBI ((SERUM(W)FREE(W)MEDIUM)/BI) L1 5870 SERUM FREE MEDIA OR SERUM FREE MEDIUM/AB,BI FILE HOME' ENTERED AT 09:04:49 ON 29 FEB 2000 0.15 SERUM IS NOT A RECOGNIZED COMMAND => s serum free media or serum free medium/ab,bi => serum free media or serum free medium/ab,bi "HELP COMMANDS" at an arrow prompt (=>). Basic Index See HELP SFIELDS for details (SERUM(W)FREE(W)MEDIA) 0 SERUM FREE MEDIUM/AB ENTRY AB' IS NOT A VALID FIELD CODE SUBSTANCE IDENTIFICATION 926 SERUM FREE MEDIA FULL ESTIMATED COST COST IN U.S. DOLLARS COVERS 1960 TO DATE. 158635 MEDIUM/BI 436337 SERUM/BJ CONTENT for details. 436337 SERUM 316301 FREE/BI S8605 MEDIA AND ACCURATE 316301 FREE => file medline

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These cells were immunoreactive for antibodies to the intermediate
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                                                                                                                                       in neurons, we observed that ES cell cultures exposed to BMP-4
                                                                                                                                                                                                                                                                       or the HNK-1 neural antigen. Furthermore, under phase contrast,
                                                                                                                                                                                                                                                                                                                                           prepared from BMP-4-treated aggregates contained a significant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         action of retinoic acid to enhance mesodermal differentiation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CS Hydrecht Laboratory, Netherlands Institute for Developmental
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                                                                                                                                                                                                       fewer cells that were immunoreactive for glial fibrillary acidic
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   fewer neurons. The action of BMP-4 was dose dependent and
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                                                                   the fifth through eighth day in suspension. In addition to the
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                                                                                                                                                                                                                                                                                                                                                                                                                     of nonneuronal cells with a characteristic flat, elongated
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMUNICATIONS, (1993 Feb 26) 191 (1)
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SO JOURNAL OF NEUROBIOLOGY, (1999 Sep 5) 40 (3) 271-87.
Journal code: JAM. ISSN: 0022-3034.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Washington University Medical School, 660 South Euclid Avenue,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     in early mammalian neural specification, we examined its effect on
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AB Members of the transforming growth factor-beta superfamily,
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=> d his ខ្ម then be the target tissue. We have now changes in the expression of On Northern blots of mRNA from undifferentiated cells, transcripts as FGFs 1,2 and 4) are mitogenic in \*\*\*serum\*\*\* . \*\*\*free\*\*\* appropriate for a similar function in mammals. Primitive ectoderm cells three members of the FGF family (a FGF, b FGF and k FGF, \*\*\*medium\*\*\* and one (KGF or FGF 7) appears to have no during differentiation, FGF R1 and FGF R3 are unchanged and cells resemble those of the inner cell mass and later primitive parietal endoderm. By contrast in human EC cells, FGF R2 is expressed before and after differentiation. In both human and although cellular morphology is altered. Differences between and \*\*\*embryonic\*\*\* \*\*\*stem\*\*\* (ES) cells from the FGF R4 is only expressed after differentiation to derivatives ES cells and are upregulated or remain constant as EC cells receptors for FGFs during the differentiation of embryonal R1, R2 and R3 are expressed. All are upregulated during mouse cells are primarily in the effects of heparin on the differentiation of effect on growth downregulated also known FGF R4 is mouse EC human and ectoderm.

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YOU HAVE REQUESTED DATA FROM 8 ANSWERS -CONTINUE? Y/(N):y

DUPLICATE 1 ANSWER 1 OF 8 MEDLINE 1999370092 MEDLINE

TI BMP4 inhibits neural differentiation of murine AN 199937009 DN 99370092

\*\*\*stem\*\*\* cells. \*\*\*embryonic\*\*\*

AU Finley MF; Devata S; Huettner JE

Department of Cell Biology and Physiology and Program in Neuroscience,

Washington University Medical School, 660 South Euclid Avenue, Missouri 63110, USA. St. Louis.

NC NS30888 (NINDS) SO JOURNAL OF NEUROBIOLOGY, (1999 Sep 5) 40 (3) 271-87. Journal code: JAM. ISSN: 0022-3034.

United States CY Ы

Journal; Article; (JOURNAL ARTICLE)

Priority Journals English 38

EM 200002 EW 20000204

Members of the transforming growth factor-beta superfamily, including bone

morphogenetic protein 4 (BMP-4), have been implicated as

neuronal and glial differentiation. To test for a possible role of

in early mammalian neural specification, we examined its effect on neurogenesis in aggregate cultures of mouse \*\*\*embryonic\*\*\*

\*\*\*stem\*\*\* (ES) cells. Compared to control aggregates, in which up to

20% of the cells acquired immunoreactivity for the neuron-specific antibody Tull, aggregates maintained for 8 days in \*\*\*serum\*\*\*

\*\*\*free\*\*\* \*\*\*medium\*\*\* containing BMP-4 generated 5to 10-fold

fewer neurons. The action of BMP-4 was dose dependent and

the fifth through eighth day in suspension. In addition to the restricted to

in neurons, we observed that ES cell cultures exposed to BMP-4 reduction

fewer cells that were immunoreactive for glial fibrillary acidic contained

or the HNK-1 neural antigen. Furthermore, under phase contrast,

prepared from BMP-4-treated aggregates contained a significant proportion

of nonneuronal cells with a characteristic flat, elongated morphology. These cells were immunoreactive for antibodies to the intermediate filament protein vimentin; they were rare or absent in control

Treatment with BMP-4 enhanced the expression of the early mesodermal genes

brachyury and thx6 but had relatively little effect on total cell

or cell death. Coapplication of the BMP-4 antagonist noggin

the effect of exogenous BMP-4, but noggin alone had no effect on counteracted

Collectively, our results suggest that BMP-4 can overcome the neuralization in either the absence or presence of retinoids neuralizing action of retinoic acid to enhance mesodermal differentiation of murine ES

cells/Copyright 1999 John Wiley & Sons, Inc

ANSWER 2 OF 8 CAPLUS COPYRIGHT 2000 ACS 1998:75491 CAPLUS DN 128:163162 TI \*\*\*Embryon

AU Dinsmore, J., Ratliff, J., Jacoby, D., Wunderlich, M., Lindberg, regulation of cellular differentiation

\*\*\*Embryonic\*\*\* \*\*\*stem\*\*\* cells as a model for studying

C. Diacrin, Inc., Charlestown, MA, voc. SO Theriogenology (1988, 49(1), 145-151 CODEN: THGNBO, ISSN: 0093-691X

LA English
AB Mouse \*\*\*embryonic\*\*\* \*\*\*stem\*\*\* (ES) cells can be

AU Finley, M. F. A.; Devata, S.; Huettner, J. E. CS. Dep. Cell Biol. Physiol, Washington Univ., St. Louis, MO 63110 locomotion in human teratocarcinoma cells
J Granerus, Marika; Bierke, Paer, Engstroem, Wilhelm
Department Pathology, Swedish University Agricultural Sciences, The human teratocarcinoma cell line (Tera 2) could be stimulated **DUPLICATE 2** Mummery C L; van Rooyen M; Bracke M; van den Eijnden-van Society for Neuroscience Abstracts, (1996) Vol. 22, No. 1-3, pp. intact cell nuclei, we concluded that this short term increase in cell LIF were added a preferential effect on clonal cell locomotion was TI Fibroblast growth factor-mediated growth regulation and receptor was due to enhanced cell survival rather than a real increase in the However this effect was only obsd. in short term (24 h) cultures. CS Hubrecht Laboratory, Netherlands Institute for Developmental moderate increase in cell no. in \*\*\*serum\*\*\* . \*\*\*free\*\*\* \*\*\*medium\*\*\* by addn. of 5 ng leukemia inhibitory factor Fifty-200 ng of LIF stimulated cell movement but exerted no proportion of cells traversing the cell cycle. When increased expression in embryonal carcinoma and \*\*\*embryonic\*\*\* comparing cell nos. with thymidine incorporation data and ANSWER 5 OF 8 CAPLUS COPYRIGHT 2000 ACS II The effects of leukemia inhibitory factor (LIF) on cell Meeting Info.: 26th Annual Meeting of the Society for Tera 2 cell proliferation at any time interval studied. Washington, D.C., USA November 16-21, 1996 SO Int. J. Oncol. (1994), 5(6), 1419-23 CODEN: IJONES; ISSN: 1019-6439 cells and human germ cell tumours. L5 ANSWER 6 OF 8 MEDLINE 1995:291533 CAPLUS AN 93191693 MEDLINE DN 93191693 Zoelen E J, Alitalo K ISSN: 0190-5295. Uppsala, S-750 07, Swed. multiplication and AN 1995:29153: DN 122:78816 English \*\*\*stem\*\*\* DT Journal Raaii J. van concus, of (LIF)mL. proportion effect on AU ၀ွ Ы LS toa Ŋ Ą ë plated in media contg. fetal calf serum. These observations support authors have extended their previous work and now show that with induction of ES cells they not only obtain GABA neurons, but also conclusion that RA acts as a general neural inducing agent and that conditions post-induction either selectively support survival of a actually further instruct cells to differentiate into different types of discs cultured in \*\*\*serum\*\*\* - \*\*\*free\*\*\* \*\*\*medium\*\*\* muscle as well as other cell types. The authors previously showed significant nos. of dopamine neurons could be detected when cells Neuronal induction of \*\*\*embryonic\*\*\* \*\*\*stem\*\*\* cells RA induction was the post-induction plating conditions used. No treatment of pluripotent ES cells with retinoic acid (RA) induced . \*\*\*free\*\*\* \*\*\*media\*\*\* optimized for neuronal survival. acid (GABA) expressing neurons. The reasons for generation of neurons as opposed to other neuronal cell types were not known. in vitro into near homogeneous populations of both neurons and TI TEC-1 characterisation of porcine embryonic cells from day 11 Meeting Info.: Annual Conference of the International Embryo AU Booth, P. J. (1); Perreau, C.; Hochereau-De Reviers, M. T. CS (1) Embryo Technol. Cent, Dan Inst. Anim. Sci., DK-8830 dopaminergic neurons. Crit. for the prodn. of dopaminergic dopaminergic neurons were detected if cells were plated in L5 ANSWER 3 OF 8 BIOSIS COPYRIGHT 2000 BIOSIS L5 ANSWER 4 OF 8 BIOSIS COPYRIGHT 2000 BIOSIS particular class of neuronal cells or that the conditions \*\*\*serum\*\*\* - \*\*\*free\*\* \*\*\*medium\*\*\* differentiation into highly enriched populations of SO Theriogenology, (1997) Vol. 47, No. 1, pp. 240. Society Nice, France January 12-14, 1997 Conference; Abstract; Conference 1996:495890 BIOSIS AN 1997:135574 BIOSIS PREV199699218246 DN PREV19979943477 gamma.-aminobutyric ISSN: 0093-691X Tiele Denmark DT Conferen LA English serum neurons after only GABA embryonic However. skeletal Z Z F

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then be the target tissue. We have now changes in the expression of
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AT The activin A-dependent proliferation of PCC3/A/1 embryonal
                                                                                                                                                                                                                                                                                                                                                           development and are present in the mouse embryo at stages that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ***medium*** and one (KGF or FGF 7) appears to have no
                                                                                                                                                                                                                                                                                  AB FGFs have been implicated in the induction of mesoderm in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       during differentiation, FGF R1 and FGF R3 are unchanged and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cells resemble those of the inner cell mass and later primitive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     parietal endoderm. By contrast in human EC cells, FGF R2 is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               expressed before and after differentiation. In both human and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and ***embryonic*** ***stem*** (ES) cells from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               although cellular morphology is altered. Differences between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FGF R4 is only expressed after differentiation to derivatives
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ES cells and are upregulated or remain constant as EC cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  receptors for FGFs during the differentiation of embryonal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R1, R2 and R3 are expressed. All are upregulated during
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ***medium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mouse cells are primarily in the effects of heparin on the
COMMUNICATIONS, (1993 Feb 26) 191 (1)
                                                                                                                                          Journal; Article; (JOURNAL ARTICLE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cells in ***serum*** . ***free***
                                                               Journal code: 9Y8. ISSN: 0006-291X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    as FGFs 1,2 and 4) are mitogenic in
                                                                                                                                                                                                             FS Priority Journals; Cancer Journals
                                                                                                    CY United States
DT Journal; Articl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       differentiation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 carcinoma (EC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             effect on growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mouse. These
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       downregulated
                                                                                                                                                                                                                                               EM 199306
                                                                                                                                                                             LA English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FGF-induced
                                                                                                                                                                                                                                                                                                                        amphibian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        resembling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    also known
                                  188-95.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FGF R4 is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    carcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mouse EC
                                                                                                                                                                                                                                                                                                                                                                                          would be
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SO\_BIOCHEMICAL AND BIOPHYSICAL RESEARCH

differentiated

Moriaki, Kitani, Hiroshi, Ikawa, Yoji (1)
CS (1) Lab. Mol. Oncol., Tsukuba Life Sci. Cent., Inst. physical and ChemicalRes., 3-1-1, Koyadai, Tsukuba 305 Japan
SO Development Growth & Differentiation, (1993) Vol. 35, No. 1, \*\*\*scrum\*\*\* . \*\*\*free\*\*\* \*\*\*medium\*\*\* without activin (EC cells) or \*\*\*embryonic\*\*\* \*\*\*stem\*\*\* cells (ES cells) of activin A, PCC3 cells began to disintegrate within 3 days under growth regulatory mechanisms of EC/ES cells and/or the action of mutant requiring activin A, thus making them useful in studies on \*\*\*medium\*\*\* without activin A if leukemia inhibitory factor required activin A to grow and/or survive in such medium. In the grew in the medium without activin A and its addition somewhat AB Examination of the growth requirements of murine embryonal \*\*\*medium\*\*\* revealed that serum-free conditions examined. P19 and AT805 EC cells grew growth rates were slightly facilitated by its addition. F9 EC cells their growth rate. Three independently isolated ES cell lines and supplemented. The addition of activin A had little effect on their feeder-dependent PSA-1 EC cells also grew in \*\*\*serum\*\*\* rates. These findings suggest that PCC3 EC cells are a sort of \*\*\*Scrum\*\*\* . \*\*\*free\*\*\* ISSN: 0012-1592 carcinoma cells PCC3 EC sells English Article \*\*\*free\*\*\* A but their pp. 81-87. (LIF) was nutritional inhibited absence even in also ş .8

properties due to repetitive cell stimulation by active signals in the neural pathways. We postulate that the stabilization of neuron-like 1983), it can be concluded that the F7 cell has the properties of an environment may represent an example of learning at the cellular \*\*\*embryonic\*\*\* \*\*\*stem\*\*\* cell of the CNS which, external signals, may switch into different alternative => s without serum or (absence (2a) serum)/ab,bi developmental depending on evel

AB' IS NOT A VALID FIELD CODE
AB' IS NOT A VALID FIELD CODE
AB' IS NOT A VALID FIELD CODE
L6 9506 WITHOUT SERUM OR (ABSENCE (2A) SERUMIYAB, BI

=> s 16 and embryonic stem/ab,bi

CS NEUROENDOCRINOL. CELLULAIRE MOLECULAIRE,

BERTHELOT, 75231 PARIS, CEDEX 05, FRANCE.

SO NEUROCHEM INT, (1986) 9 (1), 43-54 COLL. FRANCE, 11 PLACE MARCELIN

AU DE VITRY F; CATELON J; DUBOIS M; THIBAULT J;

BARRITAULT D, COURTY J, BOURGOIN S; HAMON M

MULTIPOTENT HYPOTHALAMIC CELL LINE F-7 AN

EXAMPLE OF LEARNING AT THE

CELLULAR LEVEL.

SEROTONINERGIC PROPERTIES BY THE

DN BA82:104769 TI PARTIAL EXPRESSION OF MONOAMINERGIC

AN 1986:438581 BIOSIS

DUPLICATE 3

L5 ANSWER 8 OF 8 BIOSIS COPYRIGHT 2000 BIOSIS

on EC/ES cells.

AAP' IS NOT A VALID FIELD CODE AAP' IS NOT A VALID FIELD CODE 'AB' IS NOT A VALID FIELD CODE

10 L6 AND EMBRYONIC STEM/AB,BI 17

=> dup rem 17

PROCESSING COMPLETED FOR L7 L8 3 DUP REM L7 (7 DUPLICATES REMOVED)

=> d 1- bib ab

hormones, and eye-derived growth factor has been devised which

glial conditioned medium, a brain extract from 8-to 10-day-old

AB A \*\*\*serum\*\*\* - \*\*\*free\*\*\*

supplemented with a

CODEN: NEUIDS, ISSN: 0197-0186

BA; OLD

FS

English

the mouse primitive hypothalamic nerve cell line F7 to express

permitted

YOU HAVE REQUESTED DATA FROM 3 ANSWERS CONTINUE? Y/(N):y

biochemical properties typical of monoaminergic neurons. Maximal

expression was obtained when the culture conditions were applied

days. Most (90-95%) cells then synthesized [3H]serotonin from

[3H]5-hydroxytryptophan (but not from [3H]tryptophan). No

DUPLICATE 1 L8 ANSWER I OF 3 MEDLINE AN 1999272671 MEDLINE DN 99272671

TI PIEN modulates cell cycle progression and cell survival by regulating

phosphatidylinositol 3,4,5,-trisphosphate and Akt/protein kinase B signaling pathway.

Sun H; Lesche R; Li D M; Liliental J; Zhang H; Gao J; Gavrilova N; Mueller Ρ

B; Liu X; Wu H

addition, F7 cells cultured in such \*\*\*serum\*\*\* . \*\*\*free\*\*\*

\*\*\*medium\*\*\* exhibited the capacity of accumulating

exogenous serotonin

that active

involvement of L-aromatic-amino-acid decarboxylase in this detected in the presence of carbidopa (20. mu.M), therefore

suggesting the synthesis was

process. In

by a ouabain-sensitive mechanism. These data further supported molecules in the cell environment can induce, in a primitive cell

CS Department of Genetics, Yale University School of Medicine,

Street, New Haven, CT 06520, USA. 333 Cedar

NC CA72878 (NCI)
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF

SCIENCES OF THE UNITED STATES OF

AMERICA, (1999 May 25) 96 (11) 6199-204. Journal code: PV3. ISSN: 0027-8424.

CY United States
DT Journal; Article; (JOURNAL ARTICLE)

differentiation of the same clone into oligodendrocytes (De Vitry et

Since other well-defined culture conditions can promote the

some of the enzymatic activities associated with monoaminergic

LA English FS Priority Journals; Cancer Journals EM 199908

EW 19990804

AB To investigate the molecular basis of PTEN-mediated tumor

suppression, we

introduced a null mutation into the mouse Pten gene by homologous

\*\*\*stem\*\*\* (ES) cells. recombination in \*\*\*embryonic\*\*\*

cells exhibited an increased growth rate and proliferated even in the Pten-/- ES

function also

displayed advanced entry into S phase. This accelerated G1/S

was accompanied by down-regulation of p27(KIP1), a major inhibitor for G1

cyclin-dependent kinases. Inactivation of PTEN in ES cells and in embryonic fibroblasts resulted in elevated levels of

Consequently, PTEN deficiency led to dosage-dependent increases 3,4,5,-trisphosphate, a product of phosphatidylinositol 3 kinase. phosphatidylinositol

phosphorylation and activation of Akt/protein kinase B, a

v/v synthetic serum substitute (SSS), co-cultured with BRL cells in the blastocyst stage were between 27% and 40%. After reaching the **DUPLICATE 2** after fertilization to the blastocyst stage. Embryos were co-cultured /DN 20077708 TI Culture of human embryos for studies on the derivation of human AB Several different culture conditions were evaluated for culturing consequently modulates two critical cellular processes: cell cycle epidermal growth factor. The most consistent development was blastocyst stage, continued culture of these blastocysts was only cells attached and showed initial outgrowth, but did not survive SO REPRODUCTION, FERTILITY, AND DEVELOPMENT, embryos were co-cultured with BRL cells in KSOM. Rates of with or without 10% SSS, or cultured in KSOM with 100 nM buffalo rat liver (BRL) cells in Menezo's B2 medium with or well-characterized target of the phosphatidylinositol 3 kinase phosphatidylinositol 3,4, 5,-trisphosphate and Akt signaling pathway. Akt activation increased Bad phosphorylation and AU Lavoir M.C; Conaghan I; Pedersen R.A.
CS Department of Obstetrics, Gynecology and Reproductive Sciences, University cell survival. Our studies suggest that PTEN regulates the in a medium \*\*\* without \*\*\* serum \*\*\* . In a embryos (containing 2-4 blastomeres and with >50% of California, San Francisco 94143-0720, USA pluripotent cells: a preliminary investigation. Journal; Article; (JOURNAL ARTICLE) Journal code: RAI. ISSN: 1031-3613. ANSWER 2 OF 3 MEDLINE AN 2000077708 MEDLINE progression and cell survival. serum-deprived medium (1998) 10 (7-8) 557-61. mlavoir@itsa.ucsf.edu Priority Journals fragmentation) 68 h development to promoted Pten-/ CY Australia DT Journal; Au EW 20000402 heparin binding obtained when EM 200004 LA English without 10% pathway and possible grade 4 KSOM æ 2 5 mm

FILE CONTAINS CURRENT INFORMATION. LAST RELOADED: Feb 25, 2000 (20000225/UP) CA SUBSCRIBER PRICE IAPAN SCIENCE embryonic cells were morphologically different from murine study events occurring during development. In the present work we catalase, superoxide dismutase or phenol prevented ATRA-induced **DUPLICATE 3** there was an increase in reactive oxygen species and antioxidants TI Role of retinoic acid and oxidative stress in \*\*\*embryonic\*\*\* CS Departamento de Genetica y Fisiologia Molecular, Instituto de (ES) cells are a suitable removal of the reducing agent 2-mercaptoethanol (2-ME), or by whereas others could be successfully passaged up to four times. the human colonies were characterized by individual cells and that the apoptotic program was activated in ES cells, either by all trans-retinoic (ATRA) to embryoid bodies. In these two \*\*\*stem\*\*\* cell death and neuronal differentiation. SO FEBS LETTERS, (1996 Feb 26) 381 (1-2) 93-7. Biotecnologia, UNAM, Cuemavaca, Mexico. Journal; Article; (JOURNAL ARTICLE) \*\*\*stem\*\*\* lournal code: EUH. ISSN: 0014-5793. AU Castro-Obregon S; Covarubias L Priority Journals; Cancer Journals ANSWER 3 OF 3 MEDLINE 96193920 MEDLINE without defined borders. \*\*\*Embryonic\*\*\* Netherlands AN 96193920 DN 96193920 LA English FS Priority Jo EM 199609 addition of conditions, system to colonies, colonies such as 겁 믕

ENTRY ENTRY FULL ESTIMATED COST COST IN U.S. DOLLARS CA SUBSCRIBER PRICE TOTAL SINCE FILE death. Neuronal differentiation was observed when undifferentiated cells were treated with ATRA in the \*\*\*absence\*\*\* of and the presence of 2-ME.

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FILE 'MEDLINE' ENTERED AT 09:04:54 ON 29 FEB 2000 5870 S SERUM FREE MEDIA OR SERUM FREE (FILE HOME' ENTERED AT 09:04:49 ON 29 FEB 2000) LI 5870 S SE MEDIUM/AB,BI

248 S LI AND EMBRYONIC/AB BI 2 S LI AND EMBRYONIC STEM/AB BI 25

blastocysts with high efficiency using immunosurgery, were able to

to a feeder layer in the presence of serum. Some ICMs

differentiated

passaging. Using another approach, inner cell masses (ICMs),

isolated from

FILE MEDLINE, EMBASE, BIOSIS, INPADOC, CAPLUS'

ENTERED AT 09:07:07 ON 29 **FEB 2000** 

8 DUP REM L4 (7 DUPLICATES REMOVED) 9506 S WITHOUT SERUM OR (ABSENCE (2A) 15 S L3

10 S L6 AND EMBRYONIC STEM/AB,BI 3 DUP REM L7 (7 DUPLICATES REMOVED) L5 8 DUP R L6 9506 S WI SERUM/AB,BI

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L11 75 S L9 OR L10 E GOLDSBOROUGH MINDY D/AU L12 10 S E3-E4	E TILKINS MARY LYNN/AU L13 13 SE2-E3 => s (11 or 16) and (111 or 112 or 113) 'AB' IS NOT A VALID FIELD CODE 'AB' IS NOT A VALID FIELD CODE L14 11 (L1 OR L6) AND (L11 OR L12 OR L13) => dup rem 114	PROCESSING COMPLETED FOR L14 L15 10 DUP REM L14 (1 DUPLICATE REMOVED) => d 1- bib ab YOU HAVE REQUESTED DATA FROM 10 ANSWERS - CONTINUE? Y(R):y	L15 ANSWER I OF 10 CAPLUS COPYRIGHT 2000 ACS AN 1998:114727 CAPLUS DN 128:17929 TI Recombinant protein production by CHO cells cultured in a chemically defined medium AU Gorfien, Stephen F.; Dzimian, Joyce L.; ***Tilkins, Mary Lynn *** Godwin, Glenn P.; Fike, Richard CS Life Technologies, Inc., Grand Island, NY, 14072, USA SO Anim. Cell Technologies, Inc., Grand Island, NY, 14072, USA SO Anim. Cell Technol. 9th (1998), Meeting Date 1996, 247-252. Edior(s). Narra, Yanne, Worki Menaki, Daklisher, Vilumer Docheste.	Neth.  CODEN: 65RGAA  DT Conference LA English AB Scrum-free culture of chinese hamster ovary (CHO) cells has become increasingly common as a way of obtaining high levels of expression of recombinant proteins while simplifying recovery and downstrear processing of the product. However, ***serum**** . ***free***  ***media**** may still contain one or more of a variety of animal-derived components including albumin, fetuin, various hormones and other proteins. We have demonstrated that it is possible to eliminate animal-derived proteins from a CHO medium formulation. Plasma protein fractions like album
E12 1 GOLDSBOROUGH W J/AU => s 63-64	10 (*) OLDSBOR e tilkins m 1	E5 1 TLKTYAN EAU E6 3 TLKTYAN EAU E7 1 TLKTYAN VLADIMIR G/AU E8 2 TLKORN AAU E9 3 TLKORN A CAU E10 3 TLKORN A NNEAU E11 5 TLKORN ANNE CHRISTINE/AU E12 23 TLKORN HAU	=> s e2-e3  L13 13 ("TILKINS M.L"/AU OR "TILKINS MARY LYNN"/AU) => d his  (FILE HOME' ENTERED AT 09:04:49 ON 29 FEB 2000)  FILE MEDLINE' ENTERED AT 09:04:54 ON 29 FEB 2000 L1 5870 S SERUM FREE MEDIA OR SERUM FREE MEDIUM/AB,BI L2 248 S.L1 AND EMBRYONIC/AB,BI L3 2 S.L1 AND EMBRYONIC STEM/AB,BI L3 2 S.L1 AND EMBRYONIC STEM/AB,BI	FILE WEDLINE, EMBASE, BIOSIS, INPADOC, CAPLUS ENTERED AT 09:07:07 ON 29 FEB 2000 14 15 S 13 L5 8 DUP REM L4 (7 DUPLICATES REMOVED) L6 9506 S WITHOUT SERUM OR (ABSENCE (2A) SERUM/AB,BI L7 10 S L6 AND EMBRYONIC STEM/AB,BI L8 3 DUP REM L7 (7 DUPLICATES REMOVED) FILE STNGUIDE: ENTERED AT 09:13:00 ON 29 FEB 2000 FILE MEDLINE, EMBASE, BIOSIS, INPADOC, CAPLUS' ENTERED AT 09:1445 ON 29 FEB 2000 E PRICE PAUL JAU L9 18 S E3 E PRICE PAUL JAU L10 57 S E3-84
COPYRIGHT (C) 2000 AMERICAN CHEMICAL SOCIETY (ACS) => e price paul/au	E1 3 PRICE PATTI J/AU E2 2 PRICE PATTI J/AU E3 18> PRICE PATLI JO/AU E4 144 PRICE PAUL/AU E5 1 PRICE PAUL ARAS/AU E6 8 PRICE PAUL BIANS/AU E7 26 PRICE PAUL BIANS/AU E8 2 PRICE PAUL BIANS/AU E8 2 PRICE PAUL BIANS/AU E9 4 PRICE PAUL BULFORD/AU E9 4 PRICE PAUL CAUL E10 20 20 20 20 20 20 20 20 20 20 20 20 20	E10 1 PRICE PAUL D/AU E11 .1 PRICE PAUL I/AU E12 1 PRICE PAUL I/AU => s e3 L9 18 "PRICE PAUL"/AU	E1 1 PRICE PAUL F/AU E2 1 PRICE PAUL I/AU E3 54> PRICE PAUL I/AU E4 3 PRICE PAUL I/AU E5 8 PRICE PAUL I/AU E5 8 PRICE PAUL MAU E6 4 PRICE PAUL WAU E7 1 PRICE PAUL WILLIAM IR/AU E8 2 PRICE PAUL WILLIAM IR/AU E9 1 PRICE PAULA A/AU E10 1 PRICE PERIN I/A/U E11 1 PRICE PERIN I/AU E12 22 PRICE PETER/AU	110 57 (*PRICE PAUL J'AU OR *PRICE PAUL JOHN'AU)  ⇒ s  9 or  10  L11 75 L9 OR L10  ⇒ e goldsborough mindy d'au  E1 2 GOLDSBOROUGH MAURA/AU  E2 12 GOLDSBOROUGH MINDY D'AU  E3 9 → GOLDSBOROUGH MINDY D'AU  E4 1 GOLDSBOROUGH PETER B/AU  E5 1 GOLDSBOROUGH RABU  E6 1 GOLDSBOROUGH RABU  E7 3 GOLDSBOROUGH RABU  E8 3 GOLDSBOROUGH RABU  E9 7 GOLDSBOROUGH RABU  E1 1 GOLDSBOROUGH SAU  E1 3 GOLDSBOROUGH SAU  E1 1 GOLDSBOROUGH SIAU  E1 1 GOLDSBOROUGH SIAU  E1 1 GOLDSBOROUGH SIAU

recombinant proteins owing to the ability of these cells to stably maintain the expression of foreign gene products which structurally Chinese hamster ovary (CHO) cells are commonly used for the Kobayashi, Takeshi; Kitagawa, Yasuo; Okumura, Katsuzumi. Anim. Cell Technol., 6th (1994), Meeting Date 1993, 325-9. are supplemented into the medium. Grand Island, NY, 14072, USA 1995:621945 CAPLUS 1996:690982 CAPLUS Kluwer, Dordrecht, Neth. CODEN: 61 NIMAE \*\*\*medium Technologies, Inc., DN 123:54196 TI Anchorage-de Conference \*\*\*serum\*\*\* components that 126:17853 \*\*\*medium\*\*\* Stephen F. Stephen F. Journal English English \*\*\*free\*\*\* by Chinese Editor(s): Publisher: isolation prodn. of retention Sells Ŗ 路口 占 Ľ ۲ 3 at the expense of peak cell d, so for recombinant cell lines showing of xenobiotic-inducible cytochrome P450 expression of hepatocytes supplement the culture with sodium butyrate to increase expression inverse relationship between growth and expression of recombinant (1) Life Technol. Inc., 3175 Staley Rd., Grand Island, NY 14072 using two different enzyme substrates. In both culture systems, the serum-free formulation proved to be clearly superior to the control other media, although the maximal cell d. and the highest levels of strategies which limit the peak cell d. may be useful for increasing fetuin may be replaced by plant-derived hydrolyzates, resulting in AB A serum-free formulation has been developed for the long-term that is protein-free but still undefined (CHO III PFM). CD CHO either plant or animal origin. Peak cell densities and recombinant (serum-supplemented Williams E with the rat hepatocytes and a In Vitro Toxicology, (Fall, 1997) Vol. 10, No. 3, pp. 365-371. matrix. The cultures were then evaluated for cytochrome P450 protein expression in CD CHO cultures compared favorably to vitro. Purified rat or human hepatocytes were cultured in either hepatocytes). This paper also addresses the choice of the basal L15 ANSWER 2 OF 10 BIOSIS COPYRIGHT 2000 BIOSIS expression were obsd. at later time points. We were able to TI Retention of xenobiotic-inducible cytochrome P450 gene s chem. defined formulation which contains no protein or \*\*\*Price, Paul J. (1)\*\*\*; Samrock, Roxanne L.; 10-14 days on either a collagen:collagen sandwich or scrum-containing or \*\*\*scrum\*\*\* - \*\*\*free\*\*\* 752/1 based \*\*\*serum\*\*\* - \*\*\*free\*\*\* AN 1998:13258 BIOSIS DN PREV199800013258 O.; Green, Carol E. ISSN: 0888-319X. Lobo-Affonso, Juliet \*\*\*media\*\*\* for collagen:Matrigel DUPLICATE 1 hepatocytes. ydrolyzates of expression in, DT Article LA English expression in maintenance successfully Medium is Ą ೮ 뎚

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demonstrated using small and larger-scale anchorage-dependent cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   demonstrated biol. performance which was superior to that obtained
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 formulation, designated Adherent CHO-SFM, has been specifically
                                                                                                                                                      serum usage, such as lot-to-lot performance variability, presence of
                                                                                                                                                                                                         adventitious agents, and fluctuations in price and availability. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHO cells is now an accepted method, there are many applications
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          anchorage-dependent culture is desirable. Use of SFM optimized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     systems including tissue culture flasks, roller bottles, microcarriers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                our existing options for serum-free culture of CHO cells and offers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .ltbbrac.1.0 EU.mL, resp. The utility of this formulation has been
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          end user greater flexibility in choosing an appropriate cell culture
                                                                                                                                                                                                                                                                                                                                                                                                                                             growth and protein expression of CHO cells. While suspension
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        has protein and endotoxin concns. of .ltbbrac.250 .mu.g/mL and
        culture of CHO cells is desirable since it facilitates downstream
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             suspension culture may result in suboptimal performance when
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                artificial capillary units. Cells cultured in Adherent CHO-SFM
                                                                processing and recovery of products and minimizes problems
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       anchorage-dependent culture systems. A recently developed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              culture systems. This medium contains no bovine-derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  serum-supplemented medium. Development of Adherent
                                                                                                                                                                                                                                                    authors previously developed several ***serum*** -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                to support growth and recombinant protein prodn. using
                                                                                                                                                                                                                                                                                                                                          ***media*** (SFM) formulations which support
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               L15 ANSWER 5 OF 10 MEDLINE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  components and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     formulated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            used in
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of physiol. markers similar to cells cultured in traditional serum and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Anchorage-dependent growth and recombinant protein production
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SO Anim. Cell Technol.: Basic Appl. Aspects, Proc. Int. Meet. Jpn.
                                                                                                                                             II Serum-free culture of human venous, arterial, and microvascular
                                                                                                                                                                                                                                                                                                                                      AU Battista, Paul J.; Soderland, Carl; ***Tilkins, Mary Lynn***
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AU Battista, Paul J.; ***Tilkins, Mary Lynn***; Jayme, David
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cultured in this medium demonstrate growth characteristics and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and long-term culture of human endothelial cells was described
L15 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2000 ACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             L15 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2000 ACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The use of Human Endothelial-SFM, a low-protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CS Cell Culture Research and Development Dept., Life
                                                                                                                                                                                        endothelial cells using a low-protein, ***serum***
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hamster ovary cells in ***serum*** . ***free***
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SO Am. Biotechnol. Lab. (1996), 14(11), 34,36-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   growth factor-supplemented culture medium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    International Scientific Communications
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CODEN: ABLAEY; ISSN: 0749-3223
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functionally resemble the naturally occurring human proteins.

CS GIBCO BRL/Life Technologies, Inc., Grand Island, NY 14072.. SO AMERICAN BIOTECHNOLOGY LABORATORY, (1994 Apr)

fournal code: ALA. ISSN: 0749-3223.

CY United States 12 (5) 64, 66, 68.

formulation for the SFM and the reasons for the choice of

40 Battista P J; \*\*\*Tilkins ML\*\*\*; Judd D A; Godwin G P;

barnster ovary cells.

of Chinese

Gorfien S F

\*\*\*media\*\*\* for the culture

\*\*\*Serum\*\*\* \*\*\*free\*\*\*

cells and the prodn. of recombinant proteins in suspension culture. AB Liver microsomal oxygenases are multicomponent enzyme L15 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2000 ACS AN 1994-430326 CAPLUS DN 121:30326 AU Lobo, Juliet O.; Samrock, Roxanne L.; Jayme, David W., TI Sustained inducibility of cytochrome P450 activity in rat protein content of CHO-S-SFM II facilitates downstream superior growth performance compared to four comof therapeutic proteins. Dordrecht, Neth. CODEN: 60AEAM \*\*\*Price, Paul\*\*\* Publisher: Kluwer, Conference \*\*\*Serum\*\*\* systems which \*\*\* | \*\*\* English demonstrated processing of with serum Editor(s): parallel form of Assoc. <u>10</u> ŭ SS ᇦ biomanuf. of recombinant products that structurally and functionally \*\*\*medium\*\*\* for the growth 3IBCO BRL/Life Technologies Inc., Cell Culture R and D, 2086 Cell Biology New Orleans, Louisiana, USA December 11-15, 1993 CS GIBCO BRL/Life Technol. Inc., Grand Island, NY, 14072, USA Battista, Paul J.; \*\*\*Tilkins, Mary Lynn\*\*\*; Judd, David A.; SO Anim. Cell Technol.: Basic Appl. Aspects, Proc. Int. Meet. Jpn. AB CHO cells have become increasingly important for recombinant expression, owing to their low rate of spontaneous transformation Blvd., Grand Island, NY 14072 USA 3O Molecular Biology of the Cell, (1993) Vol. 4, No. SUPPL., pp. (<100 .mu.g/mL), low endotoxin (<0.25 EU/mL) \*\*\*serum\*\*\* recombinant protein production of anchorage-dependent Chinese resemble the native mols. The authors recently developed a low \*\*\*medium\*\*\* (CHO-S-SFM II) formulated to support the L15 ANSWER 6 OF 10 BIOSIS COPYRIGHT 2000 BIOSIS Meeting Info.: Thirty-third Annual Meeting of the American TI Chinese hamster ovary (CHO) cell growth and recombinant Anim. Cell Technol., 5th (1993), Meeting Date 1992, 251-7. Kaminogawa, Shuichi; Ametani, Akio; Hachimura, Satoshi. L15 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2000 ACS \*\*\*Tilkins, M. L. \*\*\*; Battista, P. J.; Gorfien, S. F. in \*\*\*senun\*\*\* - \*\*\*free\*\*\* \*\*\*media\*\*\* Journal; Article; (JOURNAL ARTICLE) \*\*\*Serum\*\*\* . \*\*\*free\*\*\* Stephen F.; Jayme, David W. 1994:555863 CAPLUS PREV199497111369 1994:98369 BIOSIS CODEN: 60AEAM ISSN: 1059-1524. Dordrecht, Neth. AN 1994:555863 DN 121:155863 protein production Publisher: Kluwer, DT Conference Conference ovary cells. EM 199408 Grand Island LA English English Society for Editor(s): hamster/ 35 Z Z Ą 占 ځ

growth of CHO

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major limitation in the use of rodent hepatocyte cultures in toxicity testing and pharmacokinetic studies has been the rapid loss of phase
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AU GORFIENSF, ***TILKINS ML***; JUDD D; BOIME I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3-hydroxybenzo-[a]-pyrene, demonstrated maintenance of activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CS (1) GIBCO/Life Technologies Inc., Cell Culture R and D, 2086
                                                                                                                                                                                                                                                                                developed by GIBCO, total rat CP450 could be maintained for at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SO Molecular Biology of the Cell, (1992) Vol. 3, No. SUPPL., pp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ***Serum*** . ***free*** ***medium*** options for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Meeting Info.: Thirty-second Annual Meeting of the American
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cell Biology, Denver, Colorado, USA, November 15-19, 1992.
                                                                                                                        reactions catalyzed by the CP450-dependent mono-oxygenases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AN 1992:88805 BIOSIS COPYRIGHT 2000 BIOSIS AN 1992:88805 BIOSIS DN BR42:41080
TI GROWTH AND RDNA PROTEIN PRODUCTION IN AN IMPROVED ***SERUM***
***FREE*** ****MEDIUM**** FORMULATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              L15 ANSWER 9 OF 10 BIOSIS COPYRIGHT 2000 BIOSIS
AN 1993:38374 BIOSIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                fraction of primary adult rat hepatocytes, measured by the
                                                                                                                                                                                                                                                                                                                                                                    days at 75-80% day "0" levels. Metabolic studies of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SO ABSTRACTS OF PAPERS PRESENTED AT THE THIRTY-FIRST ANNUAL MEETING OF THE
                                                                                                                                                                                                        sandwich matrix and a ***serum*** - ***free***
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7-ethoxycoumarin to 7-hydroxycoumarin and of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                same 9 days comparable to the "0" time controls.
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CS GIBCO/LTI, GRAND ISLAND, N.Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hamster ovary (CHO) cell culture.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pixley, M.; Gorfien, S. F. (1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3,4-benzo-[a]-pyrene to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ISSN: 1059-1524.
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                                                                                                                                                                                                                                                                                                                            least 9
                                                                            wild type and recombinant CHO cells were adapted, maintained, cryopreserved and recovered in CHO-S-SFM II. Cells cultured in
                                                                                                                                                                                                                                                                                                                                                             3-4 times. 106 viable cells/mL and producing over 1.0 .mu.g/mL of recombinant human chorionic gonadotropin. CHO-S-SFM II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ***free*** ***media*** for CHO cells. A prototype powd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         endotoxin level of this medium reduces regulatory concerns for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GIBCO BRL/Life Technol. Inc., Grand Island, NY, 14072, USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cultures in serum-supplemented medium, reaching peak densities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  metabolize a wide variety of xenobiotics. A major component of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             recombinant proteins and reduces final product cost. Addnl., the
                                                                                                                                                                                                ***scrum*** . ***free*** ***medium*** out-perform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Anim. Cell Technol., 5th (1993), Meeting Date 1992, 195-201.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . ***free*** ***medium*** eliminates problems assocd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cultured in a ***serum*** - ***free*** ***medium***
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHO-S-SFM II exhibited performance equiv. to liq. medium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             adventitious agents and fluctuations in price and availability.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          usage, such as lot-to-lot performance variability, presence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kaminogawa, Shuichi, Ametani, Akio, Hachimura, Satoshi.
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STN INTERNATIONAL LOGOFF AT 09:18:08 ON 29 FEB 2000 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL CA SUBSCRIBER PRICE SINCE FILE TOTAL SESSION FILE 'STNGUIDE' ENTERED AT 09:13:00 ON 29 FEB 2000 FILE 'MEDL'INE' ENTERED AT 09:04:54 ON 29 FEB 2000 L1 \$870 S SERUM FREE MEDIA OR SERUM FREE MEDIUM/AB,BI FILE 'MEDLINE, EMBASE, BIOSIS, INPADOC, CAPLUS ENTERED AT 09:07:07 ON 29 FILE WEDLINE, EMBASE, BIOSIS, INPADOC, CAPLUS' ENTERED AT 09:14:45 ON 29 42.97 95.44 (FILE 'HOME' ENTERED AT 09:04:49 ON 29 FEB 2000) 13 S E2-E3 11 S (L1 OR L6) AND (L11 OR L12 OR L13) 10 DUP REM L14 (1 DUPLICATE REMOVED) 8 DUP REM L4 (7 DUPLICATES REMOVED) 9506 S WITHOUT SERUM OR (ABSENCE (2A) 10 S L6 AND EMBRYONIC STEM/AB,BI 3 DUP REM L7 (7 DUPLICATES REMOVED) 248 S LI AND EMBRYONIC/AB,BI 2 S LI AND EMBRYONIC STEM/AB,BI 75 S L9 OR L10 E GOLDSBOROUGH MINDY D/AU ENTRY 10 S E3-E4 E TILKINS MARY LYNN/AU E PRICE PAUL J/AU E PRICE PAUL/AU Executing the logoff script... FULL ESTIMATED COST COST IN U.S. DOLLARS --Logging off of STN--57 S E3-E4 L6 9506 S WILL SERUM/AB,BI 15 S L3 18 S E3 FS BR; OLD LA English FEB 2000 FEB 2000 => LOG Y => d his 67

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S20		USPT	embryonic adj10 (serum adj1 free)	
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S18		USPT	serum adj1 free	
S17 [		USPT	((((435/69.1, 325, 374, 375, 377, 395, 404, 405, 406, 407, 455).ccls.) or (536/23.1.ccls.)) and (embryonic adj1 stem)) and (serum adj1 free)	О
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S14		USPT	536/23.1.ccls.	
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<b>S</b> 9	USPT	culture.clm. and kit.clm. and cell\$1.clm. and container\$1.clm.	g
S8	USPT	culture.clm. and kit.clm. and cell\$1.clm.	
<b>S</b> 7	USPT	culture.clm. and kit.clm.	
S6	USPT	((435/404.ccls.) and (kit\$1 or product\$1)) and embryonic	g
<b>S</b> 5	USPT	(435/404.ccls.) and kit.clm.	
<b>S4</b>	USPT	((435/404.ccls.) and (kit\$1 or product\$1)) and cell\$1	
S3	USPT	(435/404.ccls.) and (kit\$1 or product\$1)	
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